What is Claimed is:

1. A testing device for detecting and locating an arcing fault in an electrical system, said arcing fault having a plurality of characteristics, said testing device comprising:

means for detecting at least one of the characteristics of said arcing fault proximate said arcing fault and outputting a responsive signal; and means for annunciating said responsive signal when said means for detecting is proximate said arcing fault, in order to locate said arcing fault in said electrical system.

- 2. The testing device as recited in Claim 1 wherein said means for annunciating comprises a visual indicator.
- 3. The testing device as recited in Claim 2 wherein said visual indicator is a display.
- 4. The testing device as recited in Claim 1 wherein said means for annunciating comprises an audible indicator.
- 5. The testing device as recited in Claim 4 wherein said audible indicator is a speaker.
- 6. The testing device as recited in Claim 1 wherein one of said at least one of the characteristics is a radio frequency signal; and wherein said means for detecting includes an antenna for receiving the radio frequency signal and a radio frequency detector for detecting the received radio frequency signal.
- 7. The testing device as recited in Claim 1 wherein one of said at least one of the characteristics is an ultrasonic sound; and wherein said means for detecting includes a pick-up coil for receiving the ultrasonic sound and outputting a corresponding electrical signal, and means for detecting the electrical signal.
- 8. The testing device as recited in Claim 1 wherein one of said at least one of the characteristics is an audible sound; and wherein said means for detecting includes a pick-up coil for receiving the audible sound and outputting a corresponding electrical signal, and means for detecting the electrical signal.
- 9. The testing device as recited in Claim 1 wherein one of said at least one of the characteristics is a signal having a frequency; and wherein said means

for detecting includes means for receiving said signal having the frequency and outputting a corresponding electrical signal, and means for detecting the electrical signal.

10. A testing device for detecting and locating an arcing fault in an electrical system having a plurality of electrical conductors, said arcing fault having a plurality of characteristics, said testing device comprising:

means for locating the electrical conductors of said electrical system;

means for detecting at least one of the characteristics of said arcing fault proximate one of said electrical conductors and outputting a responsive signal; and

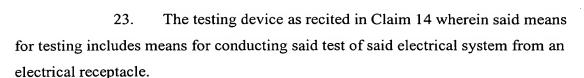
means for annunciating said responsive signal when said means for detecting is proximate said arcing fault.

- The testing device as recited in Claim 10 wherein said means 11. for locating the electrical conductors comprises means for generating a signal having a frequency in said electrical conductors, means for detecting said signal having the frequency proximate one of said electrical conductors and outputting a second responsive signal; and means for annunciating said second responsive signal when said means for detecting said signal having the frequency is proximate said one of said electrical conductors.
- The testing device as recited in Claim 11 wherein said means 12. for generating a signal having a frequency comprises an alternating current plug having at least two prongs, and a transmitter structured to generate said signal having the frequency between the prongs of said alternating current plug.
- The testing device as recited in Claim 12 wherein the prongs of 13. said alternating current plug are structured to engage an alternating current receptacle.
- 14. A testing device for detecting faults in an electrical system, and for detecting and locating an arcing fault in said electrical system, said arcing fault having a plurality of characteristics, said testing device comprising:

means for testing said electrical system to detect at least one fault in said electrical system;

means for detecting at least one of the characteristics of said arcing fault proximate said arcing fault and outputting a responsive signal; and means for annunciating said responsive signal when said means for detecting is proximate said arcing fault.

- 15. The testing device as recited in Claim 14 wherein said means for testing includes means for conducting a ground fault test of said electrical system.
- 16. The testing device as recited in Claim 15 wherein said means for conducting a ground fault test includes first means for engaging a line conductor of said electrical system, second means for engaging a ground conductor of said electrical system; and means for adjusting a load between said first and second means, in order to provide between about 6 to 100 mA of leakage current in said line conductor and said ground conductor.
- 17. The testing device as recited in Claim 14 wherein said means for testing includes means for conducting an open neutral, line or ground test of said electrical system.
- 18. The testing device as recited in Claim 14 wherein said means for testing includes means for conducting a hot and neutral reversed test of said electrical system.
- 19. The testing device as recited in Claim 14 wherein said means for testing includes means for conducting a grounded neutral test of said electrical system.
- 20. The testing device as recited in Claim 14 wherein said means for testing includes means for detecting and annunciating said at least one fault in said electrical system.
- 21. The testing device as recited in Claim 20 wherein said means for detecting and annunciating includes a speaker for audibly annunciating said at least one fault.
- 22. The testing device as recited in Claim 20 wherein said means for detecting and annunciating includes a display for visually annunciating said at least one fault.



- 24. The testing device as recited in Claim 23 wherein said means for conducting includes an alternating current plug having at least two prongs, and means for generating a test signal between the prongs of said alternating current plug.
- 25. A testing system for detecting and locating an arcing fault in an electrical system, said arcing fault having a plurality of characteristics, said testing system comprising:

means for producing an arcing signal to cause at least one of the characteristics of said arcing fault; and

a testing device comprising:

means for detecting said at least one of the characteristics of said arcing fault proximate said arcing fault and outputting a responsive signal, and

means for annunciating said responsive signal when said means for detecting is proximate said arcing fault.